ABSTRACT

A hybrid gelled-electrolyte VRLA battery and method for its manufacture are disclosed. In accordance with the present invention, the VRLA battery includes both an AGM separator and a first gelled electrolyte. In accordance with the method, a first silica-electrolyte mixture is placed in contact with the battery plates and AGM separator before formation. During plate formation, the mixture gels to form the first gelled electrolyte. In some embodiments, after forming the plates, a smaller amount of a second gelled electrolyte is added to the battery jar.